

Amendment to the Claims:

The listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-11. Cancelled.

12. (Currently Amended) ~~An apparatus according to claim 1045,~~ sorting system according to claim 4045, wherein the sensors comprise photoelectric cells placed above and/or along the conveyor.

13. Cancelled.

14. (Currently Amended) ~~An apparatus according to claim 1045,~~ sorting system according to claim 4045, wherein the sensors comprise laser sensors placed above and/or along the conveyor.

15. Cancelled.

16. (Currently Amended) ~~An apparatus according to claim 1045,~~ sorting system according to claim 4045, wherein the sensors comprise photoelectric cells and/or laser sensors placed above and/or along the conveyor.

17. Cancelled.

18. (Currently Amended) ~~An apparatus according to claim 1045,~~ sorting system according to claim 4045, wherein the stepping motor or servomotor comprises a pre-programmed control unit ~~being adapted for utilizing the control signal from the sensors for determining a the pattern of motion and/or a the speed profile of the discharge arm.~~

19. Cancelled.

20. (Currently Amended) ~~An apparatus~~ sorting system according to claim 12, wherein the stepping motor or servomotor comprises a pre-programmed control unit being adapted for utilizing the control signal from the sensors for determining ~~a~~ the pattern of motion and/or ~~a~~ the speed profile of the discharge arm.

21. Cancelled.

22. (Currently Amended) ~~An apparatus~~ sorting system according to claim 14, wherein the stepping motor or servomotor comprises a pre-programmed control unit being adapted for utilizing the control signal from the sensors for determining ~~a~~ the pattern of motion and/or ~~a~~ the speed profile of the discharge arm.

23. Cancelled.

24. (Currently Amended) ~~An apparatus~~ sorting system according to claim 16, wherein the stepping motor or servomotor comprises a pre-programmed control unit being adapted for utilizing the control signal from the sensors for determining ~~a~~ the pattern of motion and/or ~~a~~ the speed profile of the discharge arm.

25. Cancelled.

26. (Currently Amended) ~~An apparatus~~ sorting system according to claim ~~10~~ 45, wherein the discharge arm is provided with a spoon-shaped front.

27. Cancelled.

28. (Currently Amended) ~~An apparatus~~ sorting system according to claim 12, wherein the discharge arm is provided with a spoon-shaped front.

29. Cancelled.

30. (Currently Amended) ~~An apparatus~~ sorting system according to claim 14, wherein the discharge arm is provided with a spoon-shaped front.

31. Cancelled.

32. (Currently Amended) ~~An apparatus~~ sorting system according to claim 16, wherein the discharge arm is provided with a spoon-shaped front.

33. Cancelled.

34. (Currently Amended) ~~An apparatus~~ sorting system according to claim 18, wherein the discharge arm is provided with a spoon-shaped front.

35. (Currently Amended) A method for sorting items on the conveyor with the system ~~by means of an apparatus according to claim 1045, wherein the sorting of items on the conveyor comprises~~ comprising:

~~the items are either weighed~~ weighing and/or quality/type ~~graded~~ grading the items before being placed ~~placement~~ on the conveyor, or ~~weighed~~ weighing and/or quality/type ~~graded~~ grading the items on a first part of the conveyor; passing the items ~~pass~~ past the sensors placed above or along the conveyor; ~~the sensors registering~~ the size and/or lateral and longitudinal position of the items on the conveyor with the sensors, and at a same time, ~~the sensors provide~~ providing a control signal from the sensors to the control unit ~~of the apparatus~~; before the items reach the discharge arm, turning the discharge arm ~~is turned~~ from a passive position to an active angular position in relation to the conveying direction of the conveyor; and ~~the discharge arm leads~~ leading the items to a predetermined discharge position along the side of the conveyor with the discharge arm.

36. Cancelled.

37. (Currently Amended) A method for sorting items on the conveyor with the system ~~by means of an apparatus according to claim 12, wherein the sorting of items on the conveyor comprises~~ comprising:

~~the items are either weighed~~ weighing and/or quality/type ~~graded~~ grading the items before ~~being placed~~ placement on the conveyor, or ~~weighed~~ weighing and/or quality/type ~~graded~~ grading the items on a first part of the conveyor; passing the items ~~pass~~ past the sensors placed above or along the conveyor; ~~the sensors registering~~ the size and/or lateral and longitudinal position of the items on the conveyor with the sensors, and at a same time, ~~the sensors provide~~ providing a control-signal from the sensors to the control unit ~~of the apparatus~~; before the items reach the discharge arm, turning the discharge arm ~~is turned~~ from a passive position to an active angular position in relation to the conveying direction of the conveyor; and ~~the discharge arm leads~~ leading the items to a predetermined discharge position along the side of the conveyor with the discharge arm.

38. Cancelled.

39. (Currently Amended) A method for sorting items on the conveyor with the system ~~by means of an apparatus according to claim 14, wherein the sorting of items on the conveyor comprises~~ comprising:

~~the items are either weighed~~ weighing and/or quality/type ~~graded~~ grading the items before ~~being placed~~ placement on the conveyor, or ~~weighed~~ weighing and/or quality/type ~~graded~~ grading the items on a first part of the conveyor; passing the items ~~pass~~ past the sensors placed above or along the conveyor; ~~the sensors registering~~ the size and/or lateral and longitudinal position of the items on the conveyor with the sensors, and at a same time, ~~the sensors provide~~ providing a control-signal from the sensors to the control unit ~~of the apparatus~~; before the items reach the discharge arm, turning the discharge arm ~~is turned~~ from a passive position to an active angular

position in relation to the conveying direction of the conveyor; and
~~the discharge arm leads~~ leading the items to a predetermined discharge position
along the side of the conveyor with the discharge arm.

40. (Currently Amended) A method for sorting items on the conveyor with
~~the system by means of an apparatus according to claim 15, wherein the sorting of~~
~~items on the conveyor comprises~~ comprising:

41. (Currently Amended) A method for sorting items on the conveyor with
~~the system by means of an apparatus according to claim 16, wherein the sorting of~~
~~items on the conveyor comprises~~ comprising:

~~the items are either weighed~~ weighing and/or quality/type graded grading the
items before being placed placement on the conveyor, or weighed weighing
and/or quality/type graded grading the items on a first part of the conveyor;
passing the items ~~pass~~ past the sensors placed above or along the conveyor;
~~the sensors registering~~ the size and/or lateral and longitudinal position of the
items on the conveyor with the sensors, and at a same time, ~~the sensors provide~~
providing a control signal from the sensors to the control unit ~~of the apparatus~~;
before the items reach the discharge arm,
turning the discharge arm is ~~turned~~ from a passive position to an active angular
position in relation to the conveying direction of the conveyor; and
~~the discharge arm leads~~ leading the items to a predetermined discharge position
along the side of the conveyor with the discharge arm.

42. Cancelled.

43. (Currently Amended) A method for sorting items on the conveyor with
~~the system by means of an apparatus according to claim 18, wherein the sorting of~~
~~items on the conveyor comprises~~ comprising:

~~the items are either weighed~~ weighing and/or quality/type graded grading the
items before being placed placement on the conveyor, or weighed weighing
and/or quality/type graded grading the items on a first part of the conveyor;

~~passing the items pass-past~~ the sensors placed above or along the conveyor;
~~the sensors-registering~~ the size and/or lateral and longitudinal position of the items on the conveyor with the sensors, and at a same time, ~~the sensors provide~~ providing a control-signal from the sensors to the control unit ~~of the apparatus~~;
before the items reach the discharge arm,
turning the discharge arm ~~is turned~~ from a passive position to an active angular position in relation to the conveying direction of the conveyor; and
~~the discharge arm leads~~ leading the items to a predetermined discharge position along the side of the conveyor with the discharge arm.

44. (Currently Amended) A method according to claim ~~36~~ 35, wherein a ~~number of apparatuses~~ are arranged ~~at-in~~ a row along ~~the-a~~ side of the conveyor and are operated by the sensors and by the control unit as a common control unit.

45. (New) A sorting system comprising an activating member, a fastener coupled to the activating member, and a discharge arm with an end part, the end part being pivotally connected with the fastener at a side of a conveyor, the activating member swinging the discharge arm between a passive position approximately parallel to a side of the conveyor and active angular positions relative a conveying direction of the conveyor, and sensors for providing signals for determining a lateral and longitudinal position of at least one item on the conveyor; and the activating member comprising an electrically driven stepping motor or servomotor including a control unit for determining a pattern of motion and/or speed profile of the discharge arm; and

wherein the control unit receives at least one signal from the sensors used for determining the lateral and longitudinal position of the at least one item on the conveyor.